#### VIRGINIA STANDARDS OF LEARNING

**Spring 2004 Released Test** 

# GRADE 5 Science

Large Print Form

#### **Property of the Virginia Department of Education**

© 2004 by the Commonwealth of Virginia Department of Education, James Monroe Building, 101 N. 14th Street, Richmond, Virginia, 23219. All rights reserved. Except as permitted by law, this material may not be reproduced or used in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, without written permission from the copyright owner. Please contact the Commonwealth of Virginia Department of Education at (804) 225-2102, Division of Assessment and Reporting, to request written permission.

#### Science

#### **DIRECTIONS**

Read each question carefully and choose the best answer.

#### **SAMPLE**

When the Earth is seen from outer space, it looks mainly blue. This is because most of the Earth is covered with

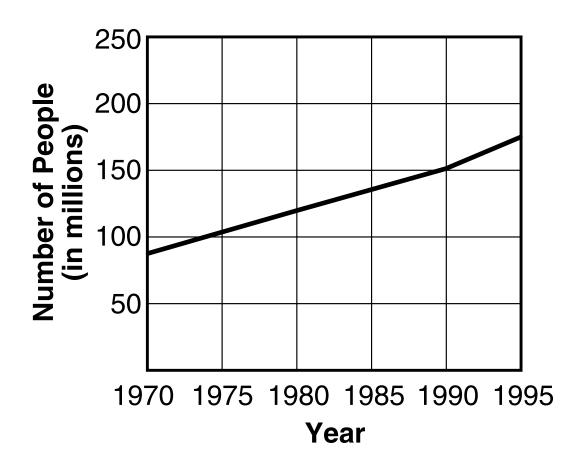
- A ice
- **B** mountains
- C oceans
- **D** deserts



- 1 The capacity of an automobile gasoline tank would most likely be measured in
  - A degrees Celsius (°C)
  - B grams (g)
  - C liters (I)
  - D meters (m)



## Population of Brazil 1970-1995

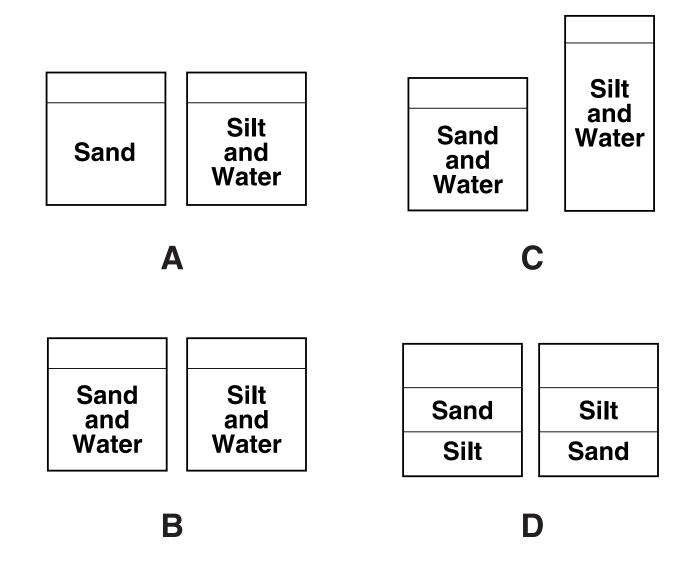


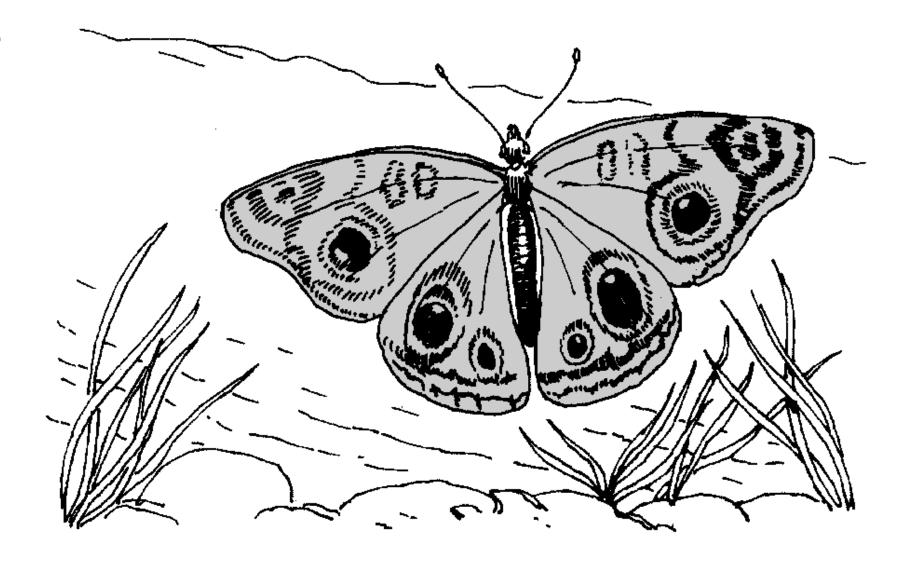
From the chart shown above, you can predict that for the year 2000, Brazil's population will

- F show a heavy drop
- G be a flat line even with 1995
- H have topped 250 million
- J continue its steady rise



3 Which of these is the fairest way to find out if sand or silt will settle faster when mixed with water?



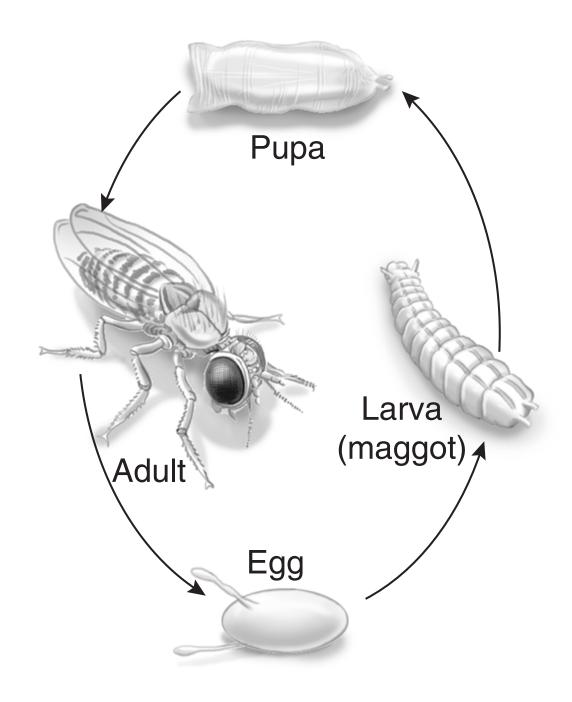


### The eyespots on this butterfly's wings allow it to

- F stay warm
- G locate nectar-filled flowers
- H fly away quickly
- J frighten or confuse enemies

- 5 The process an insect undergoes when changing from larva to adult is known as
  - A respiration
  - **B** metamorphosis
  - C photosynthesis
  - **D** reproduction





The diagram shows the life cycle of a fruit fly. During the larva stage, MOST of the organism's time is spent

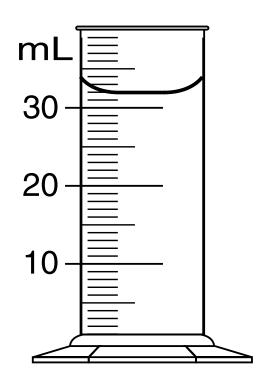
- F laying eggs
- G eating
- H resting
- J growing wings

- 7 Usually, cumulonimbus clouds are associated with weather that is
  - A dry
  - B stormy
  - C fair
  - D foggy

- 8 The rotation of the Earth on its axis causes
  - F seasons
  - G years
  - H months
  - J days

- 9 The time between today's sunrise and tomorrow's sunrise would be
  - A 12 hours
  - B 24 hours
  - C 36 hours
  - D 48 hours



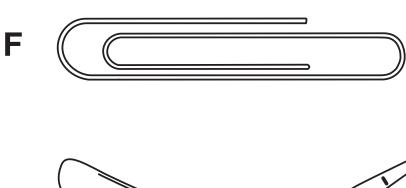


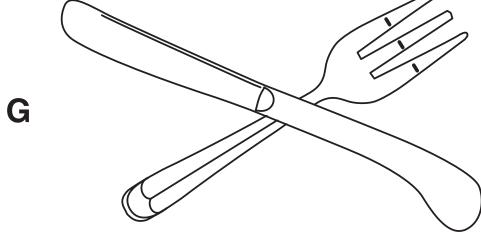
If 5 milliliters of vinegar are added to the water in the cylinder, what will be the total volume of the liquid?

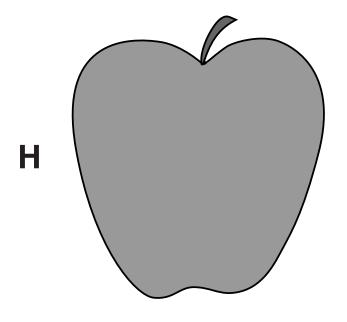
- F 30 milliliters
- G 27 milliliters
- H 37 milliliters
- J 35 milliliters

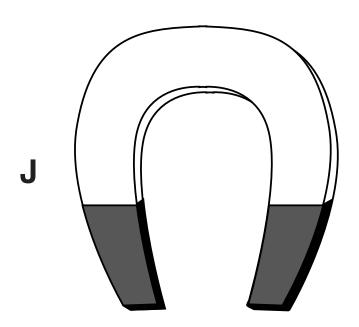
- 11 Students must conduct an experiment in which they find out how long a rubber ball bounces before it comes to a stop. Which unit would be best for recording this information?
  - A Gram
  - **B** Degrees Celsius
  - **C** Meter
  - **D** Second

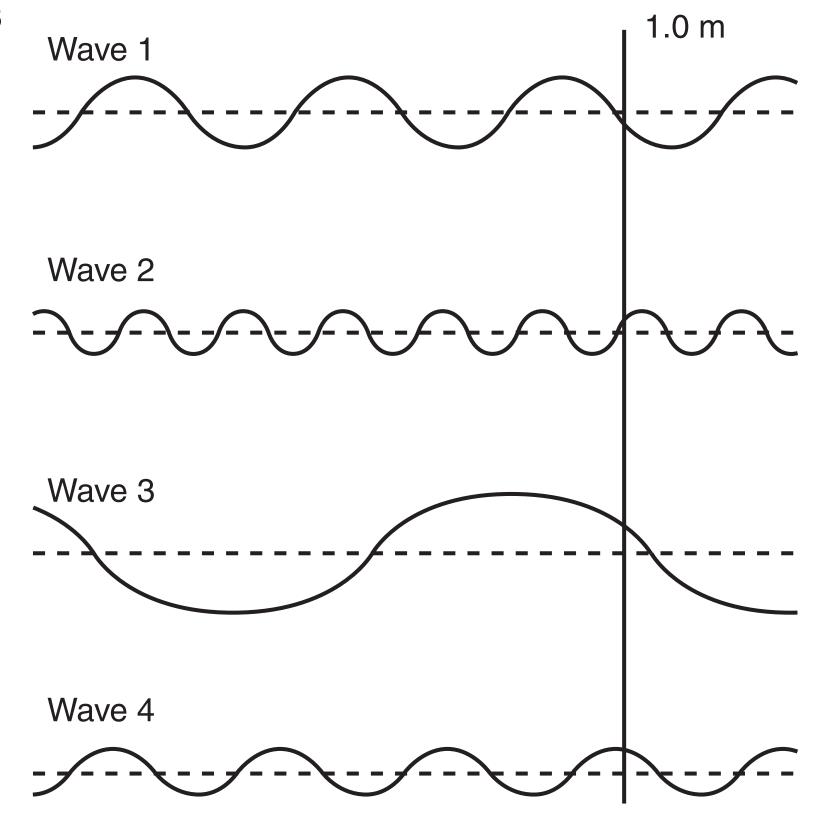
12 Which item below would have a mass closest to that of a thumbtack?











Which of the above waves has the LONGEST wavelength?

- A Wave #1
- B Wave #2
- C Wave #3
- D Wave #4

- 14 Which material will sound travel through the fastest?
  - F Water
  - G Air
  - **H** Steel
  - J Cloth

- 15 Which of the following would be useful in locating a sunken ship at the bottom of the ocean?
  - A Sonar
  - **B** Lasers
  - C Morse code
  - **D** Telescope

- 16 Which of the following materials is transparent?
  - F Clear window glass
  - **G** Your eyelids
  - **H** Solid wood door
  - J White paper

- 17 The smallest part of matter that is identifiable as an element is the
  - A atom
  - **B** molecule
  - C cell
  - D compound



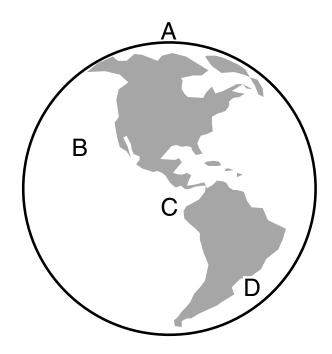
- 18 Which of the following changes is possible with the addition of heat?
  - F Liquid water changes to ice.
  - G Water vapor changes to ice.
  - H Water vapor changes to liquid water.
  - J lce changes to liquid water.

- 19 In plant cells, chloroplasts
  - A act as the cell's control center
  - B enable plant cells to produce their own food
  - C allow materials to move into and out of the cell
  - D support and protect the cell



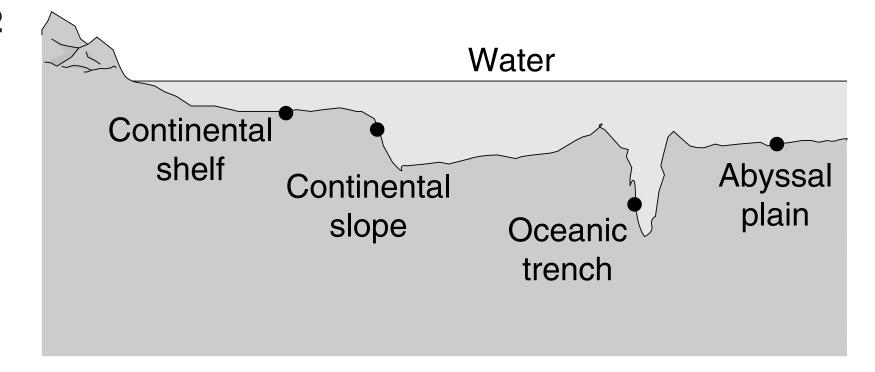
- 20 Which of the following sea animals would be classified as an invertebrate?
  - F Sea horse
  - G Squid
  - **H** Shark
  - J Seal





Which of these shows the location of a polar ice cap?

- A A
- B B
- C C
- D D



Algae and other producers need lots of sunlight. Most ocean algae would be found in the water

- F on the abyssal plain
- G in the oceanic trench
- H above the continental shelf
- J beside the continental slope

Test Sequence Number	Answer Key
1	C
2	J
3	В
4	J
5	В
6	G
7	В
8	J
9	В
10	Н
11	D
12	F
13	С
14	Н
15	A
16	F
17	A
18	J
19	В
20	G
21	A
22	Н